B. International Settlement System -- The Accounting Rate

Since in the majority of cases U.S. firms are not permitted by foreign governments to provide end-to-end international service (services provided directly to customers in the destination and origination countries), international service providers must enter into operating agreements with firms in other countries to complete international calls. These two firms must establish the accounting rate charges that they impose upon one another for the termination of an international call. When an international call is made, the telecom firm in the originating country must pay the services provider in the destination country for directing the call to its final destination. The originating carrier must pay the second carrier a settlement rate that is half the negotiated accounting rate.

Overall, and on a country-by-country basis, the United States originates more international calls than it receives. This results in U.S.-based operators making net annual out payments to foreign operators; as a consequence, the United States realizes a trade deficit. In fact, the United States makes annual settlement payments to all of its major trading partners. Table 3.7 examines the net settlement payments made by the United States to major trading partners in 1992.

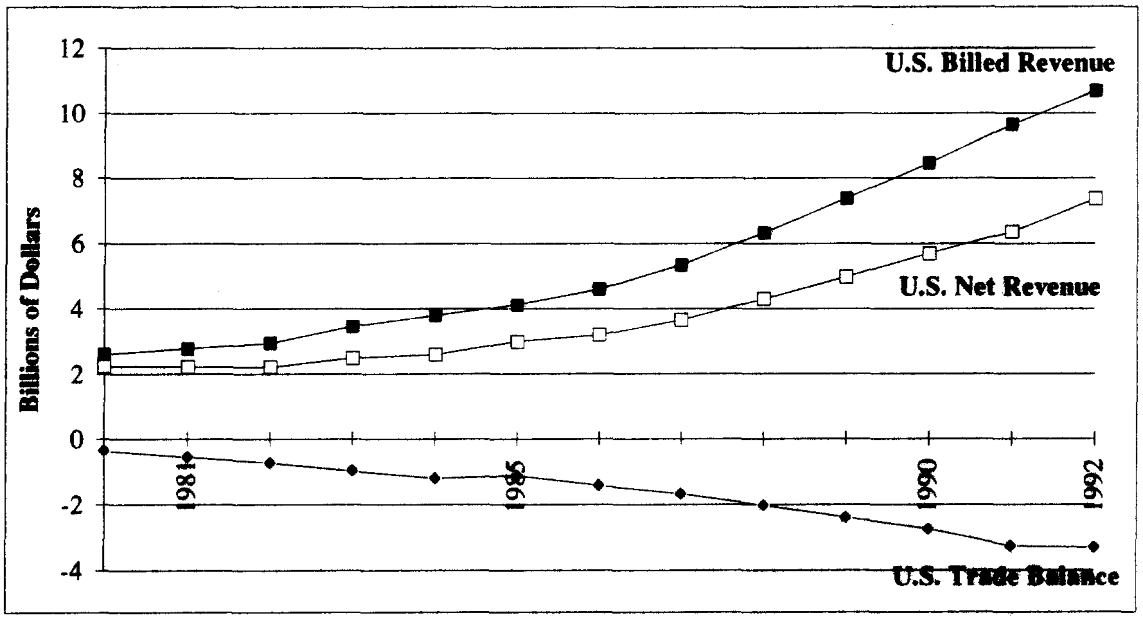
Table 3.7: International Telephone Traffic and U.S. Net Settlement Payments to Foreign Countries. Source: Federal Communications Commission, *Statistics of Common Carriers* 1992/1993.

Country	**Traffic Originating in United States** (in thousands of minutes)	**Traffic Originating in Foreign Country** (in thousands of minutes)	**Net Settlement Payment to Foreign Country** (in millions)
Mexico[86]	1,277,226	608,649	$677.0
Germany	562,891	235,716	$187.5
Philippines	195,233	22,327	$155.7
Canada	2,226,372	1,512,091	$120.8
Dominican Republic	249,403	50,176	$120.7
South Korea	206,380	95,386	$92.7
United Kingdom	733,377	501,107	$72.1
Italy	207,212	117,914	$59.8
Taiwan	162,534	82,153	$43.6
Japan	362,989	277,892	$38.9
France	239,790	156,545	$38.7
Total for Selected Countries	*6,423,407*	*3,659,956*	*$1.61 billion*
Total For *All* Countries	**10,156,212**	**5,290,895**	**$3.3 Billion**

The annual U.S. telecom services deficit has steadily increased over the past 15 years due to the increasing demand for U.S.-originated international services. The international telecom services trade deficit has expanded from $347 million in 1980 to $3.3 billion in 1992. (See Figure 3.1) Billed revenue is the total amount that U.S. customers are charged for international calls (the amount collected by the U.S. international carrier). Net revenue represents the part of billed revenue that domestic carriers retain after paying net settlement payments to foreign firms.

[86]U.S. international traffic to Mexico is not charged a flat accounting rate. International settlement charges are determined by the distance the call travels in Mexico.

Figure 3.1: Growth of the U.S. Telecommunications Services Trade Deficit. Source: Federal Communications Commission. *Trends in the International Communications Industry*, (Washington D.C.: Government Printing Office, 1994) p. 7.



Unlike most trade deficits, the telecom services deficit is an indication of the efficiency of U.S. telecom firms relative to foreign competitors. The following example illustrates why the United States runs a trade deficit in telecom services when U.S. international telecom service providers are more efficient than their international counterparts. Two relatives, Person A (who lives in Washington, DC) and Person B (who lives in Rio de Janeiro, Brazil) call each other frequently and seek to minimize their collective phone bill. A 10 minute call from DC to Rio de Janeiro costs Person A \$11.62.[87] The same call from Rio de Janeiro to Person A costs \$26.50.[88] In order to minimize their collective costs, Person A will call Person B more often. As a consequence, more calls originate from the United States and the U.S. long distance company pays the Brazilian carrier an annual net settlement payment. The competitive U.S. market environment and the efficiency of U.S.-based international telecom service providers, which make

[87]Peak rate, weekday, direct dialing on Cable and Wireless, 20 May 1994.
[88]Peak-rate, weekday, direct dialing , 3 June 1994.

U.S.-originated international calls cheaper than foreign-originated calls, generate an annual U.S. trade deficit in telecom services.[89]

The telecom services trade deficit is also aggravated by the proliferation of international call back services offered by U.S. firms. These services allow a person in a foreign country to call another country at a substantial discount by routing the call through the United States. The customer calls a number in the United States that provides a dial tone and connects the customer to the destination number at lower U.S. prices. Although customers save up to 75 percent on the call, the United States adds to its telecom services trade deficit.[90]

Under fair and competitive market conditions the deficit caused by the accounting rate system would be based on economically-efficient costs and, therefore, would not be a concern. However, the negotiated accounting rate, in almost every case, is above-cost, and therefore acts as an unfair tax on American consumers of international telecom services.[91] According to the Organization for Economic Cooperation and Development (OECD),

> "There is agreement [among OECD member countries] that the present level of collection charges faced by the customers of international telecom operators are too high and do not reflect the cost of providing the service. There is also widespread agreement that the accounting rates. . . are too high and do not reflect costs. Moreover, they restrict the ability of operators to reduce customer collection charges and they can distort traffic flows."[92]

In fact, the FCC concluded in a 1991 *Report and Order* that accounting rates would be half their present level if a cost-based accounting system was adopted

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[89]Again it is important to cite cultural differences in phone usage and income differentials as factors in traffic imbalances. If international phone charges were equal in all countries, U.S. carriers would probably still make out payments to foreign firms. However, there would be no intrinsic incentive for a firm or resident in the United States to make all of the international calls which is a growing cause of the accounting rate trade deficit.

[90]In a May 1994 decision, the FCC ruled that call back services were not in violation of U.S. law. However, the FCC did note that it would closely monitor the effect of these services on the accounting rate deficit.

[91]Federal Communications Commission, *Report and Order - Regulation of International Accounting Rates*, (Washington D.C.: Federal Communications Commission, 23 May 1991), p. 3552.

[92]OECD Working Party on Telecommunications and Information Services Policies, *International Telecommunication Pricing Practices and Principles: A Progress Review*, p. 4 (to be released).

by our trading partners.[93] Although the average accounting rates between the United States and foreign countries have been declining by 3.4 percent annually since 1991, the settlement payment still constitutes 58 percent of the total cost of a U.S. international call.[94] If accounting rates were cost-based, U.S.-originated international telephone calls would cost, on average, 30 percent less than current per minute charges, and the average cost per minute of an international call would fall from $1.00 to $.70.[95]

The lack of competition in the international telecom market of foreign countries gives U.S. telecom firms very little control over the "negotiated" accounting rate. Foreign monopoly operators are in a position to demand above-cost accounting rates and extract excessive profits from U.S. consumers because they face no competitive pressure in their home market. These monopoly profits are then used to subsidize local telephone service and, in many cases, other governmental services such as postal systems and public transportation.[96]

The total cost to U.S. consumers of above-cost accounting rates is difficult to measure, because it requires knowledge of the actual cost structure of foreign telecom providers, and this data is not made available. However, several attempts to quantify the overpayments and the total welfare loss to society define a sound range for these excess profits. The FCC in a 1991 decision cited evidence ". . . which suggests that U.S. carriers may be making overpayments of as much as $500 million per year to two regions of the world, Asia and Europe. . ."[97] This figure does not include an estimate of net settlement overpayments to other parts of the world, including Mexico, who receives the largest net settlement payment from the United States ($677 million in 1992). Another study conducted by Strategic Policy Research concluded that $2.3 billion of the total net

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[93]Federal Communications Commission, *Report and Order - Regulation of International Accounting Rates,* (Washington D.C.: Federal Communications Commission, 23 May 1991), p. 3555.
[94]U.S Department of Commerce. *U.S. Industry Outlook-Telecommunications Services,* (Washington, D.C.: Government Printing Office, January 1994), p. 29-9.
[95]Estimate by Economic Strategy Institute based on 1992 FCC calling information.
[96]Office of Technology Assessment. *U.S. Telecommunications Services in European Markets,* (Washington, D.C.: Government Printing Office, August 1993).
[97]Federal Communications Commission, *Report and Order - Regulation of International Accounting Rates,* (Washington D.C.: Federal Communications Commission, 23 May 1991), p. 3555.

settlement payments paid in 1991 to foreign countries was non-cost related.[98] The Economic Strategy Institute has determined that the amount of the subsidy to foreign firms (the non-cost component of total net settlement payments) is between $1.67 and $2.1 billion in 1992 based on FCC estimates and available cost structure data.[99] Table 3.8 reviews these three estimates.

Table 3.8: Estimated Annual Tax on U.S. Consumers Imposed by Above-Cost Accounting Rates. Source: Economic Strategy Institute.

Group	FCC	Strategic Policy Research	Economic Strategy Institute
Estimated Overpayments	$500 million	$2.3 billion	$1.67- $2.1 billion
Qualifications	Only includes Europe and Asia.	Does not take into account differentials in accounting rates.	Calculations based on the methodologies of previous estimates.

The accounting rate system has yet another problem: the accounting rates demanded by foreign monopoly operators are discriminatory. Foreign firms demand a higher accounting rate from U.S. operators than they collect from firms in other countries, even though the associated costs are equal. One example of this discrimination can be seen in the huge difference in accounting rates charged by the Spanish monopoly, Telefonica de España. Each call from the United States to Spain incurs an accounting rate charge of $.72 per minute while Telefonica charges only $.28 per minute for calls originating in the United Kingdom. Discriminatory accounting rates are inherently above-cost, and also indicate that foreign firms are exploiting U.S. consumers.

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[98] Strategic Policy Research, *The U.S. Stake in Competitive Global Telecommunications Services: The Economic Case for Tough Bargaining*, (Washington, D.C.: Strategic Policy Institute, December 1993), p. 3.

[99] We believe the Strategic Policy Research study, which is by far the most comprehensive attempt to quantify the tax, overestimates the amount for a number of reasons related to the inability to separate inefficiency from profiteering and the difficulty in accounting for regional differences in service provision.

In 1991, the FCC addressed the extent of the discrimination against U.S. consumers:

> ". . .The present level of certain intra-regional accounting rates or other country-to-country arrangements suggests that U.S. carriers may not only be required to pay above-cost accounting rates, but that U.S. carriers are subject to discriminatory treatment in this respect. In the case of Europe, for example, U.S. carriers may be paying as much as $.50 to $1.40 per minute more to terminate U.S.-originated telephone calls than other countries pay to terminate their international telephone calls in those same locations."[100]

In essence, the cost of terminating an international call is the same regardless of the country of origin. In every case, the call is directed through the local exchange to the final destination. The only distance-related cost is the cost of laying a cable across the ocean floor (or satellite transmission), and this expense is only a minor component of the total cost of terminating a call. To date, foreign firms have not disputed the accusations of discrimination and have refused to disclose the accounting rates they charge.[101] When these actions are taken into account, the rational conclusion is that foreign monopolies discriminate against American consumers.

The existence of an international settlement system that promotes above-cost, discriminatory tariffs presents an unfair and onerous burden on U.S. consumers and hinders the ability of U.S. firms to compete in the global market. The accounting rate system must be abolished in favor of a cost-based, non-discriminatory, and transparent (published) access charge. A logical, cost-based, and non-discriminatory alternative to the accounting rate system has been proposed by many of the industry's leading analysts (including the Organization for Economic Cooperation and Development) and can easily be implemented by members of the world community.

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[100]Federal Communications Commission, *op. cit.*
[101]Member OECD nations have only agreed to share average accounting rates by region (i.e. North America, Europe, etc.).

CHAPTER IV: CONSEQUENCES OF THE CURRENT REGULATORY ENVIRONMENT

A. The Empty Promise of Open Foreign Markets

Countries in Europe (e.g., Germany) and the Asia-Pacific region (most notably Thailand) have announced plans to abandon the government-owned and controlled monopoly structure and to foster competition in their domestic telecom markets. Governments are also stepping up the pace of telecom reform and development, as they recognize that their ability to upgrade the Industry will be a major determinate of their future economic prosperity. These announcements have enticed many Industry watchers and government officials to proclaim that the U.S. government need do nothing to ensure foreign market access. However, these assessments are speculative, and misguided, for three reasons:

- Corporatization and privatization of a monopoly operator does not guarantee competition.
- In most cases where countries are proposing to introduce competition, the new competition will only involve domestic firms at first, or place stringent limits and conditions on U.S. firm participation.
- Countries that have announced plans to allow foreign competitors in segments of their domestic market have intentionally left many pivotal questions unanswered.

Many countries who have announced plans or intentions to corporatize (to separate the PTO functions from other government functions and to create a corporate structure to govern operations) or privatize their PTO have not discussed when competitors (domestic or foreign) will be allowed to enter the market. Furthermore, the most common deregulation scenario excludes foreign firms as long as possible in an effort to build domestic strength at the expense of U.S. jobs and consumers. Foreign countries and PTOs have declared that they fear head-to-head competition with U.S. firms, and many U.S. firms have launched public relations efforts to calm these fears.[102] Finally, while many deregulation plans propose foreign firm participation, many of the details of the nature, extent, and terms of that entry are left unanswered.

1. The European Union: 1998

The European Union has established a January 1, 1998 deadline for member states to allow resale competition in their basic voice services markets. Four states, Greece, Spain, Ireland, and Portugal have a five-year extended grace period and "very small networks" have a two-year extension "where justified".[103] The European Union is gradually moving toward a more open and competitive market, and there are indications the EU may press for competition in the basic services market before the 1998 deadline. The European Commission is also actively seeking liberalization of the mobile communications market, having recently released a Green Paper on the mobile and personal communications market recommending abolition of monopoly operators and ". . . all restrictions on the freedom to provide services within the Community."[104] European countries are also adopting more liberal telecom services policies. Within a year, it is believed that only Austria, Norway, Luxembourg, and Switzerland will have the traditional PTO structure.

While the European Commission's push for market liberalization should be applauded, several pivotal issues determining the extent and character of non-

[102]"AT&T Calms EC Telecoms Fears," *Financial Times*, 10 November 1993, p. 1.
[103]Spain may waive this grace period. The monopoly operator, Telefonica de España, once a fierce opponent of liberalization, has led the charge to open the Spanish market. Many believe that Telefonica's policy change is the result of foreign regulations which condition entry upon reciprocal opportunities for their own firms. Many other nations are hesitant to allow a firm to enter their market if that firm wields monopoly power in their home market.
[104]European Commission. *Towards the Personal Communications Environment: Green Paper on a common approach in the field of mobile and personal communications in the European Union.* Com (94) 145. 1994, p. 175.

European participation in the market remain unresolved.[105] For example, how will the former monopolies set interconnection charges to give competitors access to their telephone networks? Will these interconnection charges be publicly disclosed or negotiated in secret (which would inevitably lead to discrimination)?[106] Will prospective new entrants be licensed by each country individually or will licensing in one country automatically amount to licensing in other E.U. member states?[107] The European Commission also delayed addressing the contentious issue of competitive public-switched network construction. It is unclear whether member states will allow the building of competing facilities.[108] Like the E.C. directive on basic voice services, the mobile communications Green Paper avoids discussing certain important issues regarding foreign participation in the E.U. mobile communications market.[109] For example, will satellite-based mobile communications firms be granted pan-European licenses?

These deregulation plans, as currently written, will not provide U.S. firms access comparable to the access afforded several E.U. firms in the United States. The Office of Technology Assessment, in an in-depth study of European telecom service markets, concluded that "As European countries reluctantly allow greater competition, their policies will continue to favor European firms."[110] It is unlikely that these agreements, in final form, will offer U.S. firms comparable market access, and it is therefore necessary for the U.S. government to support

[105]It is indeed the opinion of the author of this study that the European Commission (along with the U. K. government) are the U.S.'s best allies in opening European markets to foreign firms. The greatest opponents of market liberalization will be the PTOs and their labor unions which fear, justly, foreign competitors from the United Kingdom and the United States.
[106]Interconnection issues delayed the introduction of real competition in New Zealand and Britain for years.
[107]The European Union has stated that "The licensing of the Community telecommunications market for third countries should be linked to comparable access to such countries' markets." However, the definition of "comparable access" has not been discussed.
[108]The European Commission has announced plans to release a Green Paper on infrastructure by January 1995 in which telecommunications facilities will be discussed. Unofficial sources have disclosed that the Commission will propose a broad liberalization plan effective Jan. 1, 1998. This proposal will be widely contested by powerful national interests, particularly PTO and PTO unions.
[109]The Green Paper does mention that foreign participation should be governed by the principle of reciprocal market access.
[110]Office of Technology Assessment, *U.S. Telecommunications Services in European Markets*, (Washington, D.C.: Government Printing Office, August 1993), p. 62.

the European Commission's efforts to liberalize telecom markets in E.U. member states and to continue pressing for market access agreements.

2. Asia-Pacific Liberalization

Several Asia-Pacific countries have established plans for deregulating the telecom services market. The deregulation schemes vary by country and are often developed in coordination with corporatization and privatization plans for the monopoly operators.

- In India, privatization of the state telecom operator has already begun. Competition is scheduled for 2004, but the timetable for competitive foreign entry is still unknown.

- China recently licensed a second competitor in the cellular/mobile market but has expressed no desire to abandon the monopoly in basic telecom infrastructure and services.

- Government officials in Thailand are now discussing the complete privatization of the domestic and international telecom services market. The Thai government has announced its intention to introduce full network competition by mid-1997 but has not declared a change in its policy of excluding foreign participation in basic services.

- Malaysia has suggested that a second carrier network will begin operating in direct competition with the monopoly operator before the end of the decade, but as of yet, foreign direct participation is unclear.

It is at best an oversight, and at worst misleading, to assume that these markets will be open to U.S. direct investment in the future.

3. The Most Likely Deregulation Plan for Basic Voice Services Markets

The most common deregulatory plan excludes foreign firms as long as possible in an effort to promote domestic industry and insulate inefficient monopoly operators. If the United States government does not pressure foreign governments to open their markets to U.S. foreign investment, foreign governments will pursue reform schemes that insulate inefficient public telephone operators (PTOs) and exclude U.S. firms. U.S. firms will most likely be allowed to participate in telecom sectors where they have significant expertise and technological advantages (e.g., mobile/cellular and enhanced) and restricted in sectors where foreign countries believe domestic firms can supply the service without any major reduction in national competitiveness (e.g., basic services). The most common trend for telecom sector reform is modeled after the telecom reform in the United Kingdom, Singapore, and Malaysia, involving four stages: corporatization, privatization, domestic competition and foreign competition.

a. Corporatization and Privatization

The first two stages are corporatization and privatization. Corporatization refers to reorganizing the hierarchy of a PTO to give it a corporate business structure. Corporatization and privatization will be conducted in different order, depending on the country. Some countries will first privatize and then corporatize (e.g., Argentina) while others do the reverse (e.g., Mexico, Malaysia). While it is true that privatization has been spurred by an acknowledgment of the benefits of competition, it has also been spurred by the need of governments to raise money.[111] The amount of capital raised by a PTO sell-off depends on two factors: the extent of the monopoly's operations and the perceived ability of the PTO to remain profitable. PTOs are known to be less efficient than other firms (particularly U.S. firms) who have operated in competitive environments. It then follows that investors would shy away from investing in the PTO unless it were allowed to operate in a domestic market that was not competitive. The government will guarantee the PTO domestic market dominance and thereby maximize the capital raised.[112]

[111]Governments have traditionally used part of the money for the general budget and part for improving the competitiveness and efficiency of the PTO. For example, Greece will use 60 percent of the funds raised from a 25 percent sell off of OTE, the Greek PTO, to cover a revenue shortfall in this year's budget. The remainder is earmarked to improve OTE's aging fixed-wire network. It is also likely that in many cases foreigners will be allowed to invest in the PTO. Although certain benefits do accrue to U.S. telecom firms when investing in these PTOs, these benefits would be dwarfed by the synergy and revenues generated from competing in those markets.

[112]Several governments are stipulating that while monopolies exist, the monopoly provider must expand and upgrade the existing network. The ex-PTO is allowed to capture monopoly profits after guaranteeing that it will install new digital switching equipment and fiber optic/coax cables. The most successful nation following this strategy has been Singapore, which has boosted line

This was exactly the policy followed by the United Kingdom when British Telecom (BT) was privatized. BT was given a protected environment with only one other competitor licensed -- Mercury Communications, a subsidiary of the U.K.'s Cable and Wireless. The protected market not only helped to boost the value of the initial sell-off but also placated opponents of privatization. Privatization in Britain was seen by leading Conservatives as "selling off the family silver" and by Labour leaders as a "sell out of the British working class."[113] It was necessary to co-opt and neutralize established interests who might otherwise block the sale in order to minimize the displacement of workers. "It was important that the new companies [BT and British Gas] should have reasonably good economic prospects, so as to please new shareholders and demonstrate the policy's success."[114] Granting British Telecom a protected market neutralized both of these interests.[115]

In many countries this stage will take much longer than analysts now predict. PTO unions represent one of the most powerful political lobbies in many foreign countries -- in many countries PTOs are the single largest employer.[116] Other domestic political interests may also slow the progress of reform.[117] These interests understand that privatization will result in considerable layoffs and are prepared to slow down privatization, if necessary, in order to protect their workers and constituents.[118] In April, three-fourths of France Telecom's workers went on strike to protest privatization plans. In both Greece and Germany, for example, the governments met with significant resistance from the PTO union and were forced to make considerable concessions guaranteeing benefits and job

penetration to almost 50 per 100 population and has almost completely modernized their network. In Hungary, local exchange monopolies were licensed with the stipulation that these firms reduce the waiting list for telephone lines from the current average of 10-15 years to days or weeks.

[113]Peter Self. *Government by the Market?: The Politics of Public Choice.* (San Francisco: Westview Press, 1993), p. 73.

[114]*Ibid.* p. 73.

[115]Nations following similar privatization plans include Malaysia, Singapore, Japan, and India.

[116]An alternatively used name for Public Telephone Operator (PTO) is Post, Telephone, and Telegraph (PTT) which connotes the combination of postal service and telephone operations. Several PTO's are also monopolies in other telecommunications services, i.e. cable television and mobile telephony.

[117]For instance, on August 1, 1994 the European Parliament overwhelmingly rejected the 1998 deadline proposed for opening basic telephone services to competition. The apparent reason for the rejection was political: the Parliament recently launched a campaign to win equal decision-making rights with the Council of Ministers on E.U. legislation.

[118]Another example of this is the privatization of TELMEX, the former Mexican PTO.

security in order to win approval for privatization. The propensity of unions to demand concessions will inevitably delay, but not necessarily halt, the privatization process. It will ensure that PTOs are well protected from competitive pressures.

It is also important to remember that complete privatization may never occur. Most foreign governments have maintained a stake in the privatized PTO: the Japanese government still owns two-thirds of Nippon Telephone and Telegraph, the Malaysian Ministry of Finance holds 76 percent ownership of Telekom Malaysia, and New Zealand's government maintains a "Kiwi Share" of its former PTO. These stakes have been justified as a necessary safeguard against abuses of monopoly or dominant power but in some cases may indirectly serve to give the former PTO an advantage against foreign and domestic competitors.

b. The Introduction of Domestic Competition

Once initial privatization is complete, domestic competition will be gradually introduced into the basic services market. The reasons for gradual domestic competition, as opposed to foreign competition, are twofold: to protect the PTO from more efficient foreign competitors, and to promote powerful domestic firms and interests (e.g., utility companies and other firms owning rights of way). For example, in 1985 in the United Kingdom, Mercury Communications was granted the sole license to compete against British Telecom in the lucrative long distance and international telecom market. In Malaysia, Telekom Malaysia, the government-owned carrier corporatized in 1987, faces competition in its long distance and commercial business market from domestic carriers. In Japan, competition in the lucrative long distance market is still limited to domestic firms, nine years after corporatization.[119]

c. Permitting Foreign Competition

The final stage is the introduction of foreign competitors into the basic services market. Competition will be gradually phased in for several reasons: first, to avoid any abrupt shocks to the domestic employment market, and second, because domestic factions with considerable political power will resist efforts to allow foreign firms' participation. Governments will limit the types of services

[119]In some nations, notably Mexico, foreign firms were allowed to purchase minority stakes in the privatized PTO.

that foreign firms can deliver and most likely limit foreigners to resale provision. Before foreign competition is allowed, the government and ex-PTO will have reasonable conviction that domestic firms will not buckle under competitive pressures from foreign entrants, and domestic firms will become equity owners in the global alliances to provide international services to multinational firms. This guarantees foreign firms a share of a market that may not have accrued to them in a competitive market.[120]

The entire reform process from privatization to foreign competition in the basic services market is, in fact, very long. (See Table 4.1) In Japan, where telecom reform began in 1985, no foreign competitors have yet emerged. In Britain, it took ten years for foreign firms to be licensed for long distance and international service. In Singapore it will be at least 14 years until foreign firms are allowed to participate in the basic services market. Some countries (e.g., Mexico and New Zealand) have allowed foreign firms to purchase stakes in the PTO, but these cases are much the exception rather than the rule.

[120]Global alliances are discussed in detail in Chapter Three.

Table 4.1: Telecommunications Basic Voice Services Reform: Corporatization to Competition. Source: Economic Strategy Institute.

Country	Corporatization	Privatization (Initial Offering)	Domestic Competition	Foreign Competition
United States	1984	1984	1984	1984
United Kingdom	1984	1984	1984[121]	1990/1994[122]
New Zealand	1987	1990	1987	1990[123]
Mexico	1989	1990[124]	1990	1996/2026[125]
Japan	1985	1986	1986	Unknown
Malaysia	1987	1990	1990	Unknown
Singapore	1993	1994	2007	Unknown

The future intentions of foreign countries should not distract U.S. policy makers from the fact that today, and for the foreseeable future, foreign regulatory regimes restrict the entry of U.S. firms. Unlike the United States, who have traditionally favored telecom consumers over the service providers (through aggressive promotion of competition), foreign countries will focus simultaneously on ensuring the viability of the PTO through a temporary monopoly and promoting the development of a quality infrastructure. After privatization has been complete, it will be several years until foreign firms are allowed to compete in the domestic market, and even then, domestic firms will have institutional advantages. In the meantime, U.S. firms will be restricted from

[121]The U.K. government maintained a duopoly for seven years after the initial privatization.

[122]Foreign competitors entered the local exchange market in 1990 and licenses for long distance and international telecom services were awarded to foreigners in 1993 and 1994. The United Kingdom still maintains an informal duopoly in international facilities-based licenses.

[123]Ameritech and Bell Atlantic purchased majority holdings in the dominant carrier, New Zealand Telecom.

[124]The Mexican government allowed foreign firms to purchase minority shares in the Mexican PTO, TELMEX. Southwestern Bell participated in a consortium which bought 20 percent of TELMEX.

[125]The long distance market will be opened to foreign firms in 1996 while TELMEX retains a monopoly in local service until the year 2026.

these markets and will be unable to take advantage of their world-class efficiency.

B. Prospects for Cost-Based Accounting Rates

The problems associated with the accounting rate system would be solved by the introduction of competition in foreign markets. If many firms were competing for international traffic on both ends of the transmission, the settlement rate would be negotiated at the economically efficient cost and would continue to decrease as firms improved their efficiency. Unfortunately, as previous discussions have shown, widespread domestic competition will not occur in the foreseeable future. Therefore, if the current system of discriminatory, above-cost accounting rates is allowed to exist in its present form, U.S. consumers will continue to pay billions of dollars in unnecessary overpayments.

C. Consequences of the Present Situation

Foreign direct investment barriers and asymmetrical market access have significant consequences not only for U.S. firms, but also for the U.S. economy. Foreign regulations, by restricting U.S. firms from taking advantage of their highly competitive position, hinder the ability of the U.S. economy to grow and also take away American jobs. Furthermore, these regulations insulate inefficient monopolies and allow them to collect rents that would not accrue to them in competitive markets.

1. Closed Foreign Markets -- Opportunities Denied

If equivalent opportunities existed for U.S. firms in foreign markets, U.S. telecom services providers, and the U.S. economy, would reap significant benefits. U.S. foreign direct investment in telecom markets benefits the U.S. economy in several ways:

- Profits from overseas investments are repatriated into the U.S. economy.

- U.S. telecom equipment exports rise.

- The U.S. telecom service trade balance improves, and the price of U.S. originated international calls declines.

- More U.S. jobs are created.

a. Repatriation of funds into the U.S. economy

Repatriated revenue, simply, is net income generated in foreign countries and brought back into the United States. Fund repatriation spurs investment and job creation not only in telecom but also other industries. We can expect this revenue will be used to support new investment in research and development in the United States, thereby creating new, high-paying U.S. jobs. This investment would take place not only in the Industry but also in high-tech equipment design and manufacturing, upon which U.S. telecom firms rely heavily.

Foreign local and long distance markets

Although it is impossible to estimate the exact share of the global market U.S. basic service firms would capture if all markets were open and competitive, even if U.S. firms captured only a small portion of these markets, the U.S. economy would receive handsome benefits in the form of repatriated revenue. A conservative estimate is that U.S. telecom service providers would capture a market share between 10 and 25 percent if foreign markets were completely open to U.S. firms.[126] For example, if, in 1992, U.S. firms had captured 25 percent of the non-U.S. telecom services market, U.S. firm revenues would have increased by $72 billion and approximately $3.61 billion in net income would have been repatriated back to the United States.[127] Table 4.2 shows the potential annual amount that would have been repatriated, based on possible U.S. firm penetration of foreign basic services markets in the year 1992.

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[126]It would be some time before U.S. firms gained significant foreign market share. However, current experience and trends from U.S. firm participation in the U.K. local telephone and cable market demonstrates that U.S. firms can establish themselves as viable challengers in foreign markets and gain market share.

[127]Economic Strategy Institute estimate based on a non-U.S. market value of $331 billion and a 5.01147 percent profit margin.

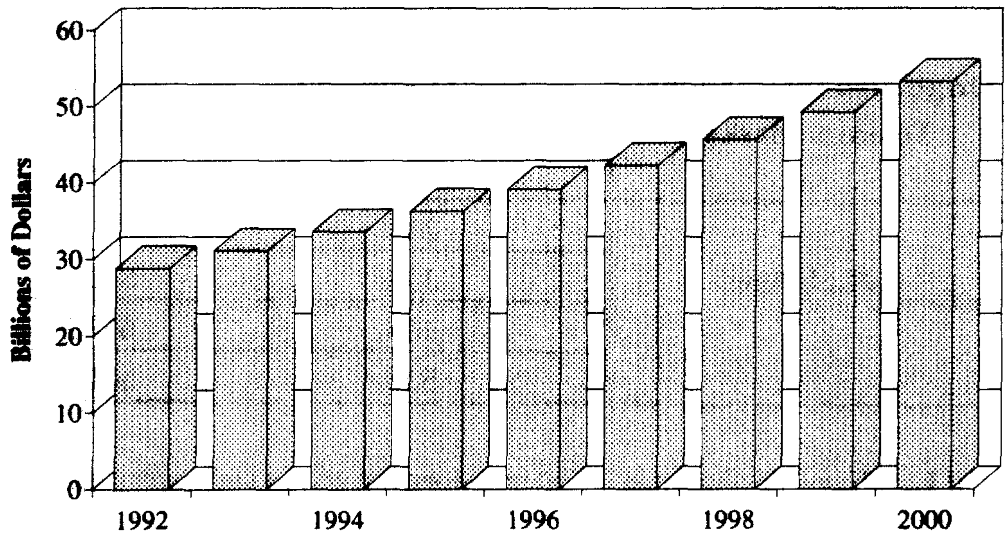
Table 4.2: Net Income from Possible U.S. Penetration in Foreign Local and Long Distance Markets, 1992 (in billions of dollars). Source: Economic Strategy Institute.

Value of Foreign Local and Long Distance Markets[128]	**U.S. Penetration in Foreign Basic Service Markets**	**U.S. Revenue from Foreign Operations** (in billions)	**Net Income**[129] (in billions)
$288 billion	10%	$28.8	$1.44
	15%	$43.2	$2.16
	20%	$57.6	$2.89
	25%	$72.0	$3.61
	30%	$86.4	$4.33
	40%	$115.2	$5.77
	50%	$144	$7.22

As foreign markets expand, the repatriation effect will increase significantly. If U.S. firms captured just 10 percent of all foreign local and long distance markets, they would accumulate over $250 billion in additional revenues between 1992 and 2000, as illustrated in Figure 4.1.

[128]$288 billion is the value of foreign (non-U.S.) basic services including local and long distance but not international calls. The United States has a particularly competitive advantage in providing international calls and it is therefore addressed separately.
[129]Net income is based on 1992 FCC common carrier data of net income as a percentage of revenues in the U.S. market. The figure for 1992 was 5.01147 percent.

Figure 4.1: Projected Additional Annual U.S. Firm Revenue from Open Foreign Local and Long Distance Markets. Source: Economic Strategy Institute.



The international market

ESI has estimated that if the market for international telecom services was free of impediments, U.S. firms would capture a minimum of 20 percent of the market for calls originating outside the United States. This estimate is based on the premise that U.S. firms would dominate the market for international calls terminating in the United States (anticipated 70 percent market share[130]). If U.S. firms were permitted to become facilities-based operators in foreign countries, they would also be able to compete in other international markets by routing calls through the United States. It is very possible U.S. firms, who are the most efficient in the world, would also capture market share on those routes, potentially raising its overall international, non-U.S. originated, market share to 50 percent. *Table 4.3 shows the additional revenues U.S. firms would have* earned in 1992 had they been able to compete in international telecom service markets.[131]

[130]The 70 percent threshold seems a reasonable amount based on two factors: the greater efficiency of U.S. telecommunications firms and the U.S. experience in the airline industry. U.S. airlines carriers, like telecom service providers, are the most efficient in the world. On Trans.-Atlantic routes in direct competition with certain European carriers, U.S. airlines have maintained a 70 percent market share.

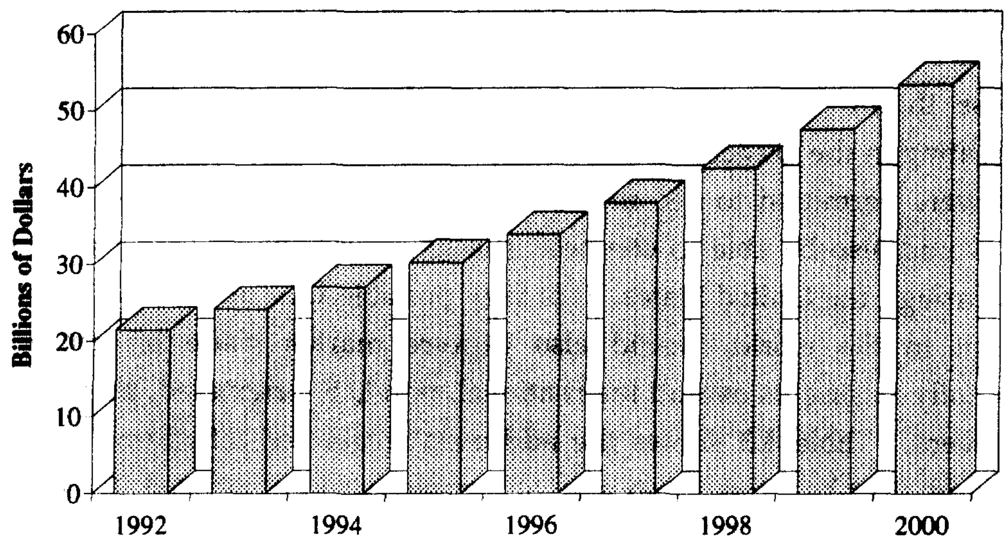
[131]This figure does not include estimates of the potential increase in revenue from greater international simple resale provision which would also be substantial.

Table 4.3: Potential Increase in U.S. Firm Revenue from Participation in International Telecom Markets in 1992. Source: Economic Strategy Institute.

Value of non-U.S. Originated International Telecom Market	U.S. Firm Share of Non-U.S. Originated International Telecom Market	Additional U.S. Firm Revenues (in billions)
$43.1 billion	20%	$8.62
	30%	$12.93
	40%	$17.24
	50%	$21.55

In fact, if U.S. firms participated in international markets and captured 50 percent market share, U.S. firms would cumulatively earn over $273 billion from 1992 to 2000. See Figure 4.2.

Figure 4.2: Projected Additional Annual U.S. Firm Revenue from Open International Telecom Markets. Source: Economic Strategy Institute.



Asymmetrical market access guarantees foreign firms a piece of the U.S. market (in addition to 100 percent of their closed home market) for "seamless" private networks at the expense of more efficient U.S. firms. To provide global service to multinational companies, telephone companies need to provide that service in all countries where multinational firms are located. A firm can provide these services in one of two ways: by building networks in foreign countries or by forming alliances with firms who have an established network in those countries. Since U.S. firms are not granted the market access necessary to build networks in foreign countries, U.S. firms are forced to establish alliances with foreign firms.

If U.S. firms were allowed to establish networks in foreign countries -- if there were symmetric market access -- the United States would undoubtedly dominate the market for providing services to multinational firms. Since U.S. firms are more efficient service providers, they would be more likely to build networks in foreign countries with less efficient service providers and hence would gain a greater share of this international market. In some cases, U.S. firms might choose to form alliances with foreign firms; however, these alliances would be determined by market forces and not by government regulation.

Despite conventional wisdom, the flurry of international alliances may not necessarily be part of the "natural" evolution of the telecom industry. In many cases it would be more beneficial for U.S. firms to establish their own networks instead of forming joint alliances. This is a choice that U.S. firms should make; not foreign governments. When U.S. firms are forced into these alliances, foreign firms gain an unfair share of the growing international telecom market at the expense of U.S. firms and workers.

Foreign cellular markets

The United States economy can also expect to benefit from the opening of foreign cellular markets. Through 1992, U.S. mobile/cellular providers had captured 49 percent of all cellular service licenses awarded to foreign firms.[132] Based on this licensing percentage, if all foreign cellular markets were completely liberalized in the year 2000, U.S. firms would record $47.62 billion in revenues,[133] of which approximately $4.76 billion in net income would flow back into the United States.

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[132] Includes U.S. firms participating in foreign consortia.

[133] The non-U.S. mobile/cellular market in the year 2000 is estimated at $118.57 billion of which approximately 82 percent will be cellular services (based on 1994 predictions of the size of each service). The non-U.S. cellular market for 2000 is therefore estimated at $97.19 billion.

b. Benefits to U.S. telecommunications equipment manufacturers

The U.S. economy also stands to benefit from the expansion of telecom equipment exports that would follow U.S. firm penetration of foreign markets. The clearest example of this effect is AT&T -- but other domestic equipment manufacturers would also benefit. AT&T is the only major telecom firm in the world that is both a service provider and an equipment manufacturer. If AT&T were permitted to become a facilities-based operator in more foreign markets, it would export more of its American-made equipment to its overseas subsidiaries.[134] Other U.S. service providers would also purchase a greater amount of American-made telecom equipment. Increased equipment production and exports would create more jobs in the United States and help ease the persistent merchandise trade deficit.[135] U.S. equipment manufacturers will also reap the economies of scale that come from greater output, and hence make U.S. manufacturers more competitive in global markets.

c. Improving the U.S. telecom services trade balance

Greater U.S. firm penetration in foreign markets will also improve the U.S. telecom services trade balance (which is currently a $3.3 billion deficit). If U.S. firms were allowed to provide international services in foreign countries, U.S. firms would charge cost-based accounting rates (which, because of the greater efficiency of American firms, would be lower than their competitor's price) to capture that market. As a result, the price of U.S. international calls would fall significantly. Furthermore, greater competition in foreign markets from efficient U.S. firms would lower the price of international telecom services overseas, spurring demand for international services to the United States.

In conclusion, the total cost of foreign barriers to U.S. firm revenue and repatriation of funds is substantial, and growing each year. Table 4.4 tallies the total loss to U.S. firm revenues based on the previous estimates of U.S. firm foreign market penetration (10 percent of foreign local and long distance

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[134]Another intensely debated issue concerns technical standards. Many nations restrict the types of equipment which can be attached to the public network. These restrictions typically aid the PTO and their equipment suppliers.

[135]Trade data released by the International Trade Commission days before the release of this study supports the theory of greater equipment sales through U.S. foreign direct investment in telecommunications markets. U.S. carrier involvement in the Mexican market, for example, has helped U.S. manufacturers secure over 47 percent of the market for all telephone products.

markets, 50 percent of the international market, and 50 percent of foreign cellular markets).

Table 4.4: Estimated Revenues Denied U.S. Firms by Closed Foreign Markets, in billions. Source: Economic Strategy Institute.

Year	Foreign Local and Long Distance Markets	International Markets	Foreign Cellular Markets	Revenues Denied
1992	$28.8	$21.6	$7.5	$57.9
1993	$31.1	$24.1	$9.4	$64.6
1994	$33.6	$27.0	$11.7	$72.3
1995	$36.3	$30.3	$14.6	$81.2
1996	$39.2	$34.0	$18.3	$91.5
1997	$42.3	$38.0	$22.8	$103.1
1998	$45.7	$42.5	$28.5	$116.7
1999	$49.3	$47.5	$35.6	$132.4
2000	$53.3	$53.4	$47.6	$154.3
			Total Revenues Denied	**$874 Billion**

2. The Accounting Rate System -- The Perpetual Trade Deficit Machine

The accounting rate system is used by foreign firms to extract unfair profits from U.S. international telecom service consumers. These overpayments represent a tremendous burden on U.S. consumers and an unchecked siphon of U.S. jobs overseas. If this trend continues, the United States will have paid more than $25 billion in cumulative overpayments in the 1990s alone. (See Figure 4.3) These monopoly profits will then be used to modernize foreign monopolies and to place U.S. firms at a competitive disadvantage in the international marketplace.